AMENDMENTS TO THE CLAIMS

The claims in this listing will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) Radically coupled polytetrafluoroethylene polymer compound comprising at least one of radiation-chemically and plasma-chemically modified polytetrafluoroethylene powder including a surface, and at least one olefinically unsaturated polymer chemically radically coupled on the surface via a reactive conversion into melt.

2. (Previously Presented) The radically coupled polytetrafluoroethylene polymer compound according to claim 1, wherein bonding site of the at least one olefinically unsaturated polymer with the surface is randomly distributed on the polymer chain.

3. (Previously Presented) The radically coupled polytetrafluoroethylene polymer compound according to claim 1, wherein the polytetrafluoroethylene powder is radiation-chemically modified.

4. (Previously Presented) The radically coupled polytetrafluoroethylene polymer compound according to claim 3, wherein the polytetrafluoroethylene powder is radiation-chemically modified with a radiation dose greater than 50 kGy.

5. (Previously Presented) The radically coupled polytetrafluoroethylene polymer compound according to claim 4, wherein the polytetrafluoroethylene powder is radiation-chemically modified with a radiation dose greater than 100 kGy.

6. (Previously Presented) The radically coupled polytetrafluoroethylene polymer compound according to claim 1, wherein the polytetrafluoroethylene powder is radiation-chemically modified in presence of reactants.

7. (Previously Presented) The radically coupled polytetrafluoroethylene polymer compound according to claim 6, wherein the polytetrafluoroethylene powder is radiation-chemically modified under influence of oxygen.

8. (Previously Presented) The radically coupled polytetrafluoroethylene polymer compound according to claim 1, wherein the at least one olefinically unsaturated polymer includes olefinically unsaturated groups in at least one of main chain and side chain of the at least one olefinically unsaturated polymer.

9. (Currently Amended) The radically coupled polytetrafluoroethylene polymer compound according to claim [[1]] 8, wherein the at least one olefinically unsaturated polymer is ~~SBS~~ styrene-butadiene-styrene block copolymer, ~~ABS~~ acrylonitrile-butadiene-styrene copolymer,, ~~SBR~~ styrene butadiene Rubber, ~~NBR~~ nitrile butadiene rubber, ~~NR~~ natural rubber and other butadiene and/or isoprene-homo-, -co- or -ter-polymers ~~are radically coupled as olefinically unsaturated polymers~~.

10. (Previously Presented) Method for producing a radically coupled polytetrafluoroethylene polymer compound comprising at least one of radiation-chemically and plasma-chemically modified polytetrafluoroethylene powder including a surface, and at least one olefinically unsaturated polymer chemically radically coupled on the surface via a reactive conversion into melt, comprising reactively converting in a melt polytetrafluoroethylene powder and at least one olefinically unsaturated polymer, the polytetrafluoroethylene powder including

reactive perfluoroalkyl-(peroxy) radical centers after at least one of radiation-chemical and plasma-chemical modification.

11. (Previously Presented) The method according to claim 10, wherein the polytetrafluoroethylene powder comprises radiation-chemically modified polytetrafluoroethylene powder.

12. (Previously Presented) The method according to claim 10, wherein the polytetrafluoroethylene powder is radiation-chemically modified with a radiation dose greater than 50 kGy.

13. (Previously Presented) The method according to claim 12, wherein the polytetrafluoroethylene powder is radiation-chemically modified with a radiation dose greater than 100 kGy.

14. (Previously Presented) The method according to claim 10, wherein the polytetrafluoroethylene powder is radiation-chemically modified in presence of reactants.

15. (Previously Presented) The method according to claim 14, wherein the polytetrafluoroethylene powder is radiation-chemically modified under influence of oxygen.

16. (Previously Presented) The method according to claim 10, wherein the polytetrafluoroethylene powder is a micropowder.

17. (Previously Presented) The method according to claim 10, wherein the reaction into a melt is performed in a melt mixer.

18. (Previously Presented) The method according to claim 17, wherein the reaction into a melt is performed in an extruder.

19. (Previously Presented) The method according to claim 10, wherein the at least one olefinically unsaturated polymer includes olefinically unsaturated groups in at least one of main chain and side chain of the at least one olefinically unsaturated polymer.

20. (Currently Amended) The method according to claim 10 wherein the at least one olefinically unsaturated polymer is ~~SBS~~ styrene-butadiene-styrene block copolymer, ~~ABS~~ acrylonitrile-butadiene-styrene copolymer,, ~~SBR~~ styrene butadiene Rubber, ~~NBR~~ nitrile butadiene rubber, ~~NR~~ natural rubber and other butadiene- and/or isoprene-homo-, -co- or -ter-polymers.